



DEPARTMENT OF THE ARMY
AREA II SUPPORT ACTIVITY
UNIT #15333
APO AP 96205-5333

REPLY TO
ATTENTION OF:

IMKO-AB-SO

1 September 2005

COMMAND POLICY #10-7

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Area II Support Activity Lockout/Tagout Policy

1. REFERENCES:

- a. 29 CFR 1910.147, The control of hazardous energy (Lockout/Tagout).
- b. Safety and Health Requirements Manual, EM 385-1-1, Section 12, Control of Hazardous Energy (lockout/tagout).

2. PURPOSE. The purpose of this policy is to establish the procedures for the lock out or tagout of energy isolating devices. It shall be used to ensure the machine or equipment is isolated from all potentially hazardous energy, and locked out or tagged out before qualified personnel of Area II perform any servicing or maintenance activities where the unexpected energization, start-up, or release of stored energy could cause injury.

3. RESPONSIBILITIES. Personnel of Area II shall be instructed in the safety significance of the lockout/tagout procedure by the section supervisor. Each new or other personnel whose work operations are or may be in the area shall be instructed in the purpose and use of the lockout and tagout procedures during initial job safety briefing.

4. APPLICABILITY. This policy is applicable to all Area II employees whose job requires them to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires them to work in an area in which such servicing or maintenance is being performed. The principle of this policy should be followed while performing duties at TDY sites also. Follow TDY installation's Lockout/Tagout program if available.

5. Scope and Policy. Lockout/Tagout is required (decision process summarized in Figure 1) anytime servicing and/or maintenance takes place if an employee is:

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- a. Required to remove or bypass a guard or other safety device.
- b. Required to place any part of their body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where a danger zone exists during a machine operating cycle.
- c. Required to work on or near non-power transmission or distribution exposed electrical hazards unless de-energizing introduces additional or increased hazards or is not feasible due to equipment design or operational limitations.

NOTE: This policy/procedure applies to any source of stored energy (electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy source) unless the stored energy source can be removed by simply unplugging the equipment and the equipment is unplugged during maintenance or servicing (with the plug under the control of the person performing the maintenance or service).

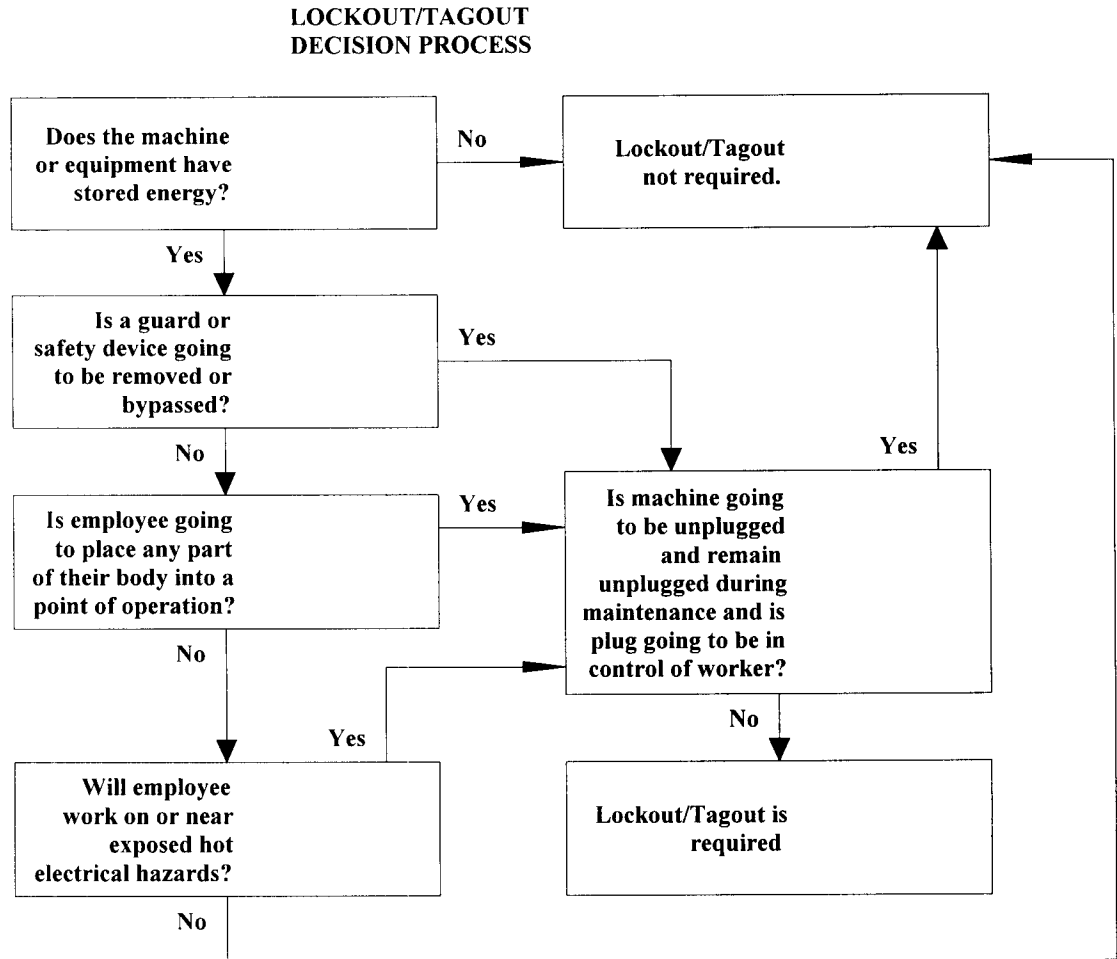


Figure 1

6. REQUIRED EQUIPMENT.

a. Lockout Locks. OSHA requires standardization of the locks used to lockout hazardous energy sources. The section supervisor is responsible to ensure that safety signs, tags, and locks are available in adequate supply. Locks used for lockout of hazardous energy within the Area II project **MUST** meet the following minimum requirements:

(1) Locks must be labeled with a special label. Label must have the Organization and Phone Number of the crew/individual installing the lock clearly written in the spaces provided in the label.

(2) Locks must be key type (combination will NOT be used).

(3) The use of locks with master keys is prohibited. The lock's single key should be in the control of the person applying the lock, or responsible for the lock in the case of lock transfer at the end of a shift.

b. Tagout Tags. OSHA requires standardization of tags used to tagout hazardous energy sources. Tags **MUST** meet the following minimum requirements:

(1) The tag must be affixed at the point where the hazardous energy source is isolated (switch, valve, wedge, etc) not simply affixed in the general area.

(2) The tag must be affixed with a "self locking" and "non re-usable" tie wrap rather than by the string.

(3) The tag must be completely filled out. Especially critical is the employee's name and the equipment involved.

(4) A tag is required in all cases, even when a lock is used.

c. Other Lockout Equipment. OSHA requires that all devices used for lockout/tagout be "singularly identified" and "not used for other purposes". Equipment, as listed below, that is to be used for lockout/tagout, must be designated/isolated for lockout/tagout and must not be used for other purposes:

- (1) DANGER Tag
- (2) Lockout Locks
- (3) Chains used to lock valves
- (4) Wall switch lockouts
- (5) Valve covers

- (6) Plug locks
- (7) Block out breakers
- (8) Ball valve lockouts
- (9) Any other device used to lockout hazardous energy sources

7. STEPS TO LOCKOUT EQUIPMENT.

a. Identify the specific piece of equipment that is going to be serviced.

b. Identify the “single” power source that energizes the equipment such as a switch, circuit breaker, valve, spring, etc.

Note: Hydraulic and Pneumatic Systems usually involve a number of pipes and valves, and must be treated differently than electrical systems. The hazards associated with these systems are usually pressure releases of substances like steam or hydraulic fluid.

c. Identify and obtain all equipment necessary to lockout and tagout this single power source (lock, hasp, tag, self-locking attachment for tag, chain, cover, etc.).

Note: There are special lockout devices that have been made specifically for Hydraulic and Pneumatic Systems. They include padlocks and chains, as well as valve clamps. Normally, standard tags are sufficient in these situations.

d. Notify all employees that are affected by the piece of equipment being locked out.

e. If the equipment is running, use the established procedure to shut the equipment down. If shutdown requires customer permission obtain permission before proceeding.

f. Bring the equipment to a state of zero stored energy. As an example, locking out a hydraulic lift that is still suspended might allow the lift to come down and possibly injure the employee.

g. Lockout the source of stored energy with a hazardous energy lockout lock and place a tagout tag on the hasp of the lock. The tag must be completely filled in with appropriate information. It is critical that the name of the employee who placed the lock be clearly indicated on this tag.

Note: Steps to take when working with a Hydraulic or Pneumatic System include bleeding any pressurized lines, testing bled lines using down stream valves, and installing blinds in piping where needed. Additional precautions should be taken to prevent major moving parts from slipping by installing blocks, brackets or pins, isolating equipment from vibrations and shutting down adjacent machines, if necessary.

h. When locking out electrical equipment, confirm that all electrical energy has been removed by the use of a voltmeter.

i. When locking out other forms of energy, confirm that the source of stored energy has been removed by attempting to restart the equipment (ensure personnel are well clear before accomplishing this step).

j. After trying to start the equipment, make sure that all valves, levers, and push buttons have been returned to the OFF/Neutral position.

k. The equipment is now locked out or tagged out and ready to be serviced.

8. RESTORING MACHINES OR EQUIPMENT TO NORMAL PRODUCTION OPERATION.

After the servicing or maintenance is complete and equipment is ready for normal production operations, the following steps are the minimum necessary to reenergize locked out equipment:

a. Place all safe guards back on the equipment.

b. Remove all tools, parts, etc., around the area that could cause a potential hazard when the equipment is started.

c. Check the area around the machines or equipment to ensure no one is exposed.

d. Remove lockout/tagout devices according to the standard starts up procedure. Notify personnel that the locks or tags have been removed and the equipment is in service.

9. TAGOUT

Tagging out equipment requires the placement of a tag on the equipment, warning other individuals that it is being serviced and should not be re-energized. Tagging by itself is not allowed if the equipment is capable of being locked out with a lock.

Tagging alone should only be used as a last resort. Always attempt to isolate the hazardous energy source by additional methods such as removing fuses, blocking access to switches, etc., if the energy control cannot be locked. It must be emphasized that the use of tags alone is only authorized under the following conditions:

a. When the equipment is incapable of being physically locked out by a padlock.

b. When it is impractical to lock it out because the system's shutdown could pose potential harm to other individuals or to a system. An example of this type situation might include the requirement to isolate a portion of a building electrical circuit where the main power to the building is capable of being locked out but the sub-circuit is not. In this case, if shutting the power off to the whole building could pose potential harm to personnel or to systems within the building it would be acceptable to isolate the energy source with a tag and at least one other backup such as the removal of a fuse or blocking access to the switch.

c. Regardless of whether a lock is installed or not, a tag is **ALWAYS** required. The tag must always be affixed as near as possible to the source of energy isolation (switch, valve, etc.) and must be affixed with a "non re-usable" and "self locking" Tie Wrap.

10. LOCKOUTING EQUIPMENT WITH MORE THAN ONE PERSON

There may be times when two or more employees are required to lockout/tagout the same piece of equipment, or an employee is working on the same piece of equipment with another contractor or customer representative. Examples may include employees from two different crews, two different trades (electrician and mechanic), etc. In these cases, the following additional steps must be followed:

a. If the equipment has not yet been locked out, each employee will be directly involved in the lockout and verification process and will then install their own lock (with key controlled by them) on a multiple lock hasp or other appropriate device that allows the use of multiple locks. Employees will properly affix a tagout tag to their own lock.

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b. If other employees have previously locked out the equipment, and additional employees are required to work on the equipment, they must notify the employees whose locks are already installed before adding their locks and tags.

c. If another contractor has previously locked out the equipment, and additional employees are required to work on the equipment, they must go through all steps of lockout/tagout, following the applicable procedure to verify that all energy sources have been identified and locked out.

d. When each employee completes their portion of the work they must notify all employees whose locks and tags are on the equipment that they have finished their work and are removing their lock and tag.

e. The last employee to remove their lock and tag follows the steps to re-energize the locked out equipment.

11. IRREGULAR REMOVAL OF LOCKS AND TAGS

Under normal circumstances, the ONLY person authorized to remove a hazardous energy lock or tag is the person who placed it on the energy source (in the case of a transferred lock this would become the person currently holding the key and whose name is on the tag affixed to the lock).

If it is necessary to remove the device(s), every attempt **MUST** be made to locate the person who holds the key (should be the same person listed on the affixed tag) before the lock/tag is removed. If the person cannot be located then the lock/tag may be removed (cut off) by a member of Management only if, the job cannot wait until the person who placed the tag/lock can be located to remove it. The supervisor who approves the removal of a lock under these conditions is responsible and absolutely accountable (whether the lock is cut off or removed by a key by him/her or someone that he/she instructs to remove it) for the following minimum actions:

a. Personally insuring the area is safe and that activation of the energy source will not pose a hazard to equipment or personnel.

b. If another company or contractor placed the original lock/tag on the energy source, making every effort possible to notify an appropriate member of their supervision of the need to remove the tag/lock BEFORE it is removed.

c. Making every effort to ensure the person who placed the original lock/tag is notified that their lock/tag was removed as soon as they return to work, or as soon as they can be located, whichever is first. Never allow that person to return to the area without being notified that their lockout of the energy source has been removed.

d. Re-installing a lock and/or tag if it is necessary after the required maintenance or operation has been completed.

12. OUTSIDE SERVICING AND/OR CONTRACTOR PERSONNEL

Whenever outside servicing personnel, such as outside contractors or sub-contractors, are involved in operations relating to equipment or machinery lockout or tagout that affects Area II government employees, the affected Area II supervisor must review their energy control procedures with the responsible person of the outside employer. The reviewing supervisor will make a written record of incidents in which they have briefed contractors of written policies and inform the Area II government employees of their activities.

13. REPLACING OR REPAIRING EQUIPMENT

All new equipment having stored energy must be designed to accept a lockout device. Any new equipment received that does not meet this standard must either be modified to accept a lockout device or returned. If existing equipment does not meet this policy requirement, it should be taken out of service immediately until it is modified or disposed of. When existing equipment is renovated, or major modifications are made, the equipment must also be modified to accept a lockout device.

14. TRAINING REQUIREMENTS

Training will be provided to ensure the purpose and function of the lockout and tagout programs are understood by supervisors and operators. The training will include the following:

a. Each authorized lockout/tagout user will receive training in recognition of applicable hazardous energy sources, the type and magnitude of energy available in the workplace, and the methods and means necessary for energy isolation and control.

b. All affected personnel shall be instructed in the purpose and use of the energy control procedure.

c. All other personnel whose work or operations are or may be in an area where energy control procedures may be utilized will be instructed about the procedure, and be instructed that they are prohibited from restarting or reenergizing machines or equipment which are locked or tagged out.

d. Retraining will be provided for all authorized and affected personnel whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, when there is a change in the energy control procedures, when periodic inspection of the program or procedure indicates deviation from this procedure, or when the unit commander, supervisor, or safety manager determines there are inadequacies in personnel knowledge or use of the energy control procedure.

e. Lockout is the preferred method of energy isolation and control and provides the highest level of personnel protection. Tagouts may evoke a false sense of security and their meaning needs to be understood as part of the overall energy control program. If a tagout must be used as required by a particular situation, the following must be noted and included in authorized user and affected worker training.

(1) Tags are a warning and do not provide the physical restraint as locks do.

(2) When a lock or tag is attached to an energy isolating device, only the person, supervisor, or the designated representative who initially installed the lock or tag can remove it, and it can never be bypassed, ignored, or otherwise defeated.

(3) Tags may cause a false sense of security, and their use and limitations need to be understood as part of the overall energy control program.

(4) Tags must be legible and understandable.

(5) Tags must be securely attached to the energy isolating devices so that they do not become inadvertently or accidentally detached during use.

(6) The employer certifies that employee training has been accomplished and is being kept up-to-date. The document should contain each employees' name and dates of training.

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15. INSPECTION

a. The Area II Support Activity Safety Office will conduct regular inspections of lockout/tagout procedures. This will be performed to ensure that authorized lockout/tagout personnel follow the procedures outlined in this program. The inspection will include as a minimum, the program's procedures and training and self-inspection requirements.

b. Daily self-inspection will be conducted by the section to ensure compliance with all program elements. The self-inspection will include as a minimum, the identification of the machines and equipment on which the lockout and tagout program is used, a review of each person's responsibilities under the program, and that all necessary training has been conducted and documented. The self-inspection will be documented to include the date of the inspection and the section representative conducting the self-inspection.

c. The "Lockout/Tagout Procedure Checklist" (See Enclosure 1) or the "Irregular Removal of Lockout/Tagout Procedure Checklist" (See Enclosure 2) will be completed by the inspector. Any discrepancies or violations of the lockout/tagout program should be noted on the form. The section supervisor will ensure that any problem areas are addressed and actions taken to prevent re-occurrence.

16. SHIFT CHANGES OR LEAVING EQUIPMENT LOCKED OUT OVERNIGHT

The nature of the work may require that a piece of equipment be left locked out overnight, or that a lockout situation extends into another shift. If a lock and/or tag must be left on overnight or into another shift, the following actions **MUST** be taken:

a. If the tag was not entered in the Lockout/Tagout Log - the lockout/tagout information must be entered on the Lockout/Tagout Log before the employee leaves for the day.

b. If the tag **was not** entered in the Lockout/Tagout Log - as indicated above, and another employee on a subsequent shift is to continue working on the equipment, the key for the lock must be transferred to the on-coming employee before the off-going employee departs. The off-going employee must also remove their tag and enter the tag information in the Lockout/Tagout Log. The on-coming employee receives the key, completes a tag with their name and information, enters the tag in the Lockout/Tagout Control Log, and affixes this new tag to the existing lock at the work site.

c. If the tag **was** entered in the Lockout/Tagout Log, and another employee on a subsequent shift is to continue working on the equipment, the key for the lock must be transferred from off-going to on-coming employee, the off-going employee must remove their tag, and the on-coming employee must complete a new tag (entering it in the Lockout/Tagout Log and installing it on the lock). If equipment is to be locked/tagged on a long-term basis the key will be transferred to a member of supervision and a new tag installed with this person's name on it. The tag must always match the name of the individual holding the key.

d. Information in the Lockout/Tagout Log. The on-coming employee receives the key, completes a tag with their name and information, enters the tag in the Lockout/Tagout Control Log, and affixes this new tag to the existing lock at the work site.

e. If the tag **was** entered in the Lockout/Tagout Log, and another employee on a subsequent shift is to continue working on the equipment, the key for the lock must be transferred from off-going to on-coming employee, the off-going employee must remove their tag, and the on-coming employee must complete a new tag (entering it in the Lockout/Tagout Log and installing it on the lock).

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f. If equipment is to be locked/tagged on a long-term basis the key will be transferred to a member of supervision and a new tag installed with this person's name on it. The name on the tag must always match the name of the individual holding the key.

17. LOCKOUT/TAGOUT CONTROL LOG

The Lockout/Tagout Control Log is designed to keep track of lockout/tagout situations that extend past the shift in which the lock/tag is installed. Locks/Tags may be installed for a short duration (never extending past the current shift) without an entry into the Lockout/Tagout Control Log. However, if a lock or tag is to remain past the end of the shift in which they were installed, the employee **MUST** enter the lock and tag in the Lockout/Tagout Control Log before departing work for the day (See Shift Changes/Leaving Equipment Locked out Overnight Section for additional information).

18. DEFINITIONS

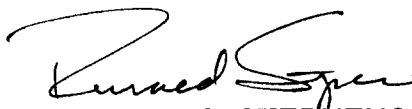
a. **Affected employee** - Any employee whose job requires them to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires them to work in an area in which such servicing or maintenance is being performed.

b. **Authorized (Lockout/Tagout) User** - An employee who locks or tags out machines/equipment to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when their duties include performing servicing or maintenance. Only authorized employees may lockout or tagout equipment.

19. The proponent of this SOP is Area II Support Activity Safety Office.

20. POC for this SOP is Mr. Jeffrey Hyska, Area II Safety Manager at 738-4643/7207.

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RONALD C. STEPHENS
COL, SC
Commanding

DISTRIBUTION:

A

LOCKOUT/TAGOUT PROCEDURE CHECKLIST

PREPARATION

1. Notify all affected supervisors ()
2. Notify all affected employees ()
3. Ensure that you know and understand:
 - (a) Type of magnitude of energy to be locked out ()
 - (b) Location and type of isolating devices involved ()
 - (c) The method of lock out being employed ()

SEQUENCE OF LOCKOUT/TAGOUT

1. All preparation steps completed ()
2. Take equipment or machinery out of operation by means of normal shut down procedure ()
3. Operate the energy isolating device(s) ()
4. Ensure that there is no stored energy ()
5. Lock or tag out isolating device(s) and relieve or restrain any stored energy ()
6. List all energy isolating device(s) locked or tagged out, or stored energy sources that are relieved or restrained ()
7. Operate normal operating controls to ensure that the machine or equipment will not operate ()
8. Ensure that all operating controls are returned to the neutral position ()

RESTORING TO NORMAL PRODUCTION STATUS

1. Ensure that all machine servicing and/or maintenance is complete ()

Encl 1

2. Ensure that all tools, parts, mechanical locks and like items are removed from machinery or equipment ()
3. Ensure that all guards, shrouds and safety devices are properly installed and operational ()
4. Notify other personnel in the area and ensure that all personnel are clear of any potential hazard ()
5. Remove lockout/tagout device(s) and mechanical restraint(s) ()
6. Operate energy isolating device to restore power to machinery or equipment ()
7. Inspect area to ensure that machinery or equipment is operational and safe for normal production ()
8. Inform affected Supervisor(s) that machine is returned to normal production status ()
9. Inform affected employee(s) that machine is returned to normal production status ()

LOCKOUT/TAGOUT REMOVED BY

Printed Name

Signature

Date

IRREGULAR REMOVAL OF LOCKOUT/TAGOUT PROCEDURE CHECKLIST

PREPARATION

1. Notify all affected supervisors ()
2. Notify all affected employees ()
3. Ensure that you know and understand:
 - (a) Type of magnitude of energy to be locked out ()
 - (b) Location and type of isolating devices involved ()
 - (c) The method of lock out being employed ()

REMOVAL OF LOCKOUT/TAGOUT DEVICE (S)

1. Ensure that all machine servicing and/or maintenance are complete. If not completed, ensure that a tag out is placed on the machine or equipment to prevent starting. ()
2. Ensure that all tools, parts, mechanical locks and like items are removed from machinery or equipment. ()
3. Ensure that all guards, shrouds and safety devices are properly installed and operational. ()
4. Notify other personnel in the area and ensure that all personnel are clear of any potential hazard. ()
5. Remove lockout/tagout device(s) and mechanical restraint(s) ()
6. Inspect area to ensure that machinery or equipment is operational or that area is safe for employees after removal of energy isolating device(s) ()
7. Inform affected Supervisor(s) that machine is returned to normal production Status ()

Encl 2

8. Inform affected employee(s) that machine is no longer tagged out ()

LOCKOUT/TAGOUT REMOVED BY

Printed Name

Signature

Date

Notes:



DEPARTMENT OF THE ARMY
HEADQUARTERS, AREA II SUPPORT ACTIVITY
UNIT #15333
APO AP 96205-5333

REPLY TO
ATTENTION OF:

IMKO-AB-SO

9 September 2005

COMMAND POLICY 10-8

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Area II Support Activity (SA) Confined Space Entry Program

1. REFERENCES:

- a. AR 385-10, 29 Feb 00, The Army Safety Program
- b. AR 11-34, 15 Feb 90, The Army Respiratory Protection Program
- c. AR 40-5, 15 Oct 90, Preventive Medicine
- d. EM 385-1-1, 3 Nov 2003, Safety and Health Requirements Manual,
- e. 29 CFR 1910.146, Occupational Safety and Health Administration Standard, Permit-Required Confined Spaces for General Industry
- f. 29 CFR, 1910.134, Occupational Safety and Health Administration Standard, Respiratory Protection.
- g. Command Policy Letter 10-2, Area II Respiratory Protection Program and SOP.
- h. ANSI Z117.1-1989, American National Standards Institute, Safety Requirements for Confined Spaces.

2. PURPOSE: Establishes guidelines and procedures for entry into confined spaces and provide information to all military, civilian, and contract employees who are required to enter and perform work in confined spaces within Area II This program addresses procedures:

- a. To assure that only trained, qualified, and certified personnel perform duties involving entry or rescue operations within permit-required confined spaces.
- b. To ensure personnel are properly equipped prior to entering a confined space.